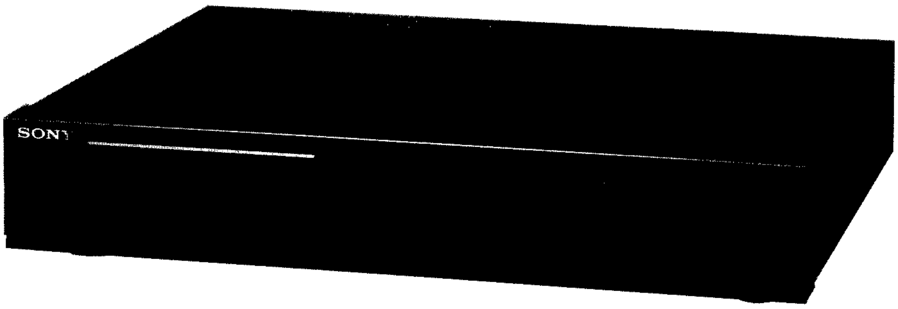
ST-S100L/S300L

SERVICE MANUAL

AEP Model
UK Model



SPECIFICATIONS

Tuner

Circuit system	FM stereo, FM/AM superheterodyne tuner Quartz-locked PLL digital synthesizer system

FM tuner

Frequency range	87.5 - 108 MHz
Antenna terminals	75 ohms unbalanced 300 ohms balanced West Germany and Italian model: 75 ohms unbalanced
Intermediate frequency	10.7 MHz
Sensitivity (at 46 dB quieting)	16.8 dBf, 3.6 μV (mono) 37.9 dBf, 43 μV (stereo) West Germany and Italian model: 16.8 dBf, 1.8 μV (mono) 37.9 dBf, 21.5 μV (Stereo)
Signal-to-noise ratio (at 40 kHz deviation)	74 dB (mono) 69 dB (stereo)
Harmonic distortion	ST-S100L: 0.15% (mono), 0.3% (stereo) at 1 kHz ST-S300L: 0.08% (mono), 0.15% (stereo) at 1 kHz
IM distortion	ST-S100L: 0.15% (mono), 0.3% (stereo) ST-S300L: 0.08% (mono), 0.15% (stereo)
Separation	50 dB (at 1 kHz)
Frequency response	40 Hz - 12.5 kHz ±0.5 dB
Selectivity	70 dB (at 300 kHz)
Capture ratio	1.0 dB
AM suppression ratio	65 dB
Image response ratio	70 dB
IF response ratio	70 dB
Spurious response ratio	80 dB
Muting threshold	30 dBf
Automatic tuning threshold	30 dBf
Output	410 mV, 4.7 klohms (at 40 kHz deviation)

AM tuner

Frequency range	Except Italian model: MW: 531 - 1,602 kHz LW: 153 - 281 kHz Italian model: MW: 522 - 1,611 kHz LW: 144 - 288 kHz
Antenna	Layout-free AM antenna External antenna terminal
Intermediate frequency	450 kHz
Usable sensitivity (when layout-free AM antenna is used)	500 μV/m (999 kHz) 700 μV/m (230 kHz)
Signal-to-noise ratio	54 dB (50 mV/m) (999 kHz) 50 dB (50 mV/m) (230 kHz)
Harmonic distorton	0.3% (50 mV/m, 400 Hz)
Selectivity	32 dB

—Continued on page 2—

MICROFILM

FM STEREO/FM-AM TUNER

SONY®

General

Power requirements	U.K. model: 240 V AC (or 220 V AC adjustable by authorized Sony personnel), 50/60 Hz European model: 220 V AC (or 240 V AC adjustable by authorized Sony personnel), 50/60 Hz
Power consumption	10 W
Dimensions	ST-S100L: Approx. 430 x 83 x 246 mm (w/h/d) (17 x 3⅜ x 9¾ inches) ST-S300L: Approx. 430 x 80 x 355 mm (w/h/d) (17 x 3¼ x 14 inches)
Weight	ST-S100L: Approx. 2.6 kg (5 lb 12 oz) ST-S300L: Approx. 3.1 kg (6 lb 13 oz)
Accessories supplied	Remote control cord (1) (ST-S300L) Connecting cord (1) FM ribbon antenna (1) (Except West Germany and Italian model) FM wire antenna (1) (Italian model) Layout-free AM antenna (1)

Precautions

On safety

- Before connecting the unit to the power source, check that the operating voltage of your unit is the same as the local power line voltage.
- Should any solid object or liquid fall into the unit, unplug the unit and have it checked by qualified personnel before operating it any further.
- Unplug the unit from the wall outlet if it is not to be used for an extended period of time. To disconnect the cord, pull it out by the plug. Do not pull the cord itself.

On installation

- To prevent internal heat buildup, place the unit in a location with good air circulation. Do not place it on a soft surface, such as a rug that would block the ventilation holes on the bottom.
- Do not install the unit in a location:
  - — near heat sources
  - — subject to direct sunlight, mechanical vibration or shock
  - — exposed to rain, moisture, dirt or dust.

On operation

When the unit is not being used, turn the power off to conserve energy and extend the useful life of your unit.

On cleaning the cabinet

Clean the cabinet, panels and controls with a soft cloth lightly moistened with a mild detergent solution. Do not use any type of abrasive pad, scouring powder or solvent such as alcohol or benzine.

On repacking

Do not throw away the carton and the packing material. This makes an ideal container when transporting the unit. When shipping the unit, repack it as it was packed at the factory.

For any question or problem that is not covered in this manual, please consult your nearest Sony dealer.

CONTENTS

Section *Title* *Page*

Specification 1
Precautions 2
Model Identification 2

SECTION 1. GENERAL
Location of Controls 3

SECTION 2. ADJUSTMENTS 4

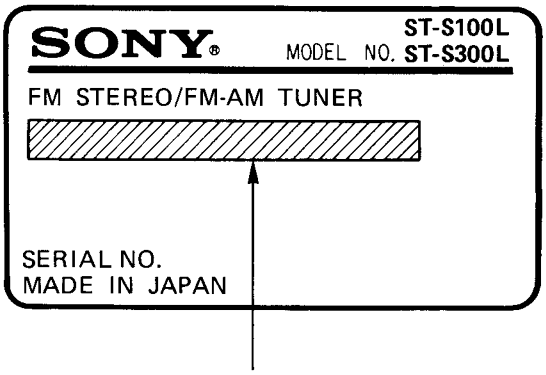
SECTION 3. DIAGRAMS
3-1. Printed Wiring Boards 6
3-2. Schematic Diagram 9
3-3. Printed Wiring Boards (S100L) 13
3-4. Semiconductor Lead Layouts 15
3-5. Schematic Diagram (S100L) 15

SECTION 4. EXPLODED VIEWS 17

SECTION 5. ELECTRICAL PARTS LIST . . . 19

MODEL IDENTIFICATION

—Specification Label—



ST-S100L:			
AEP, West Germany, IT model:	220V AC	50–60Hz	10W
UK model:	240V AC	50–60Hz	10W
ST-S300L:			
AEP, West Germany, IT model:	220V AC	50–60Hz	10W
UK model:	240V AC	50–60Hz	10W

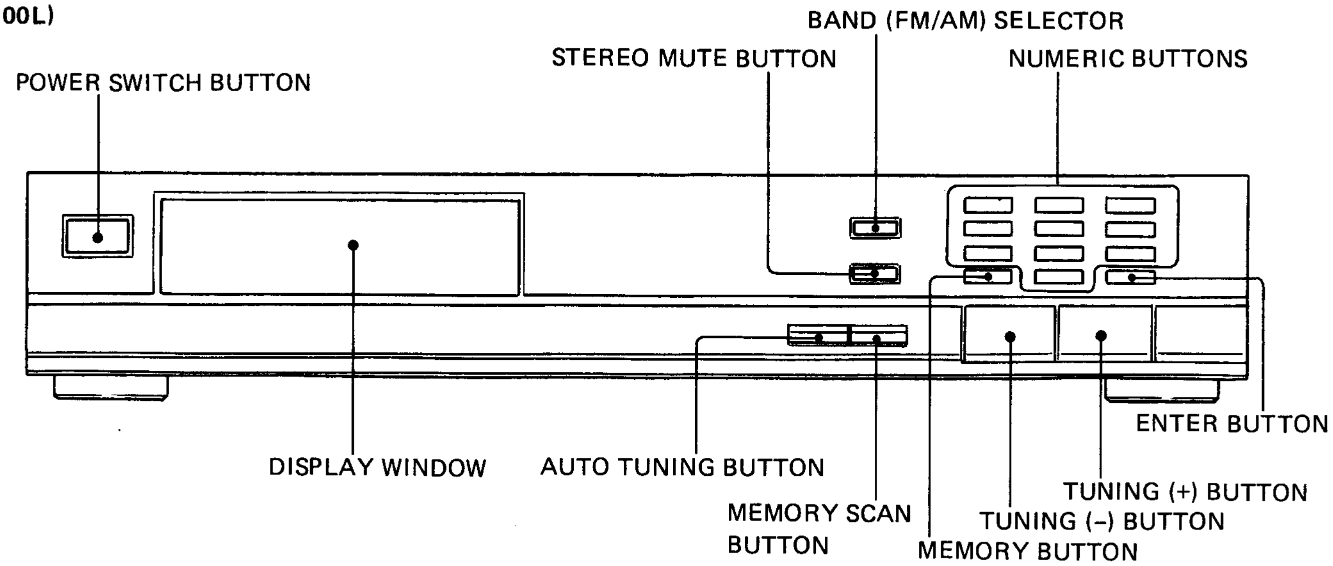
SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

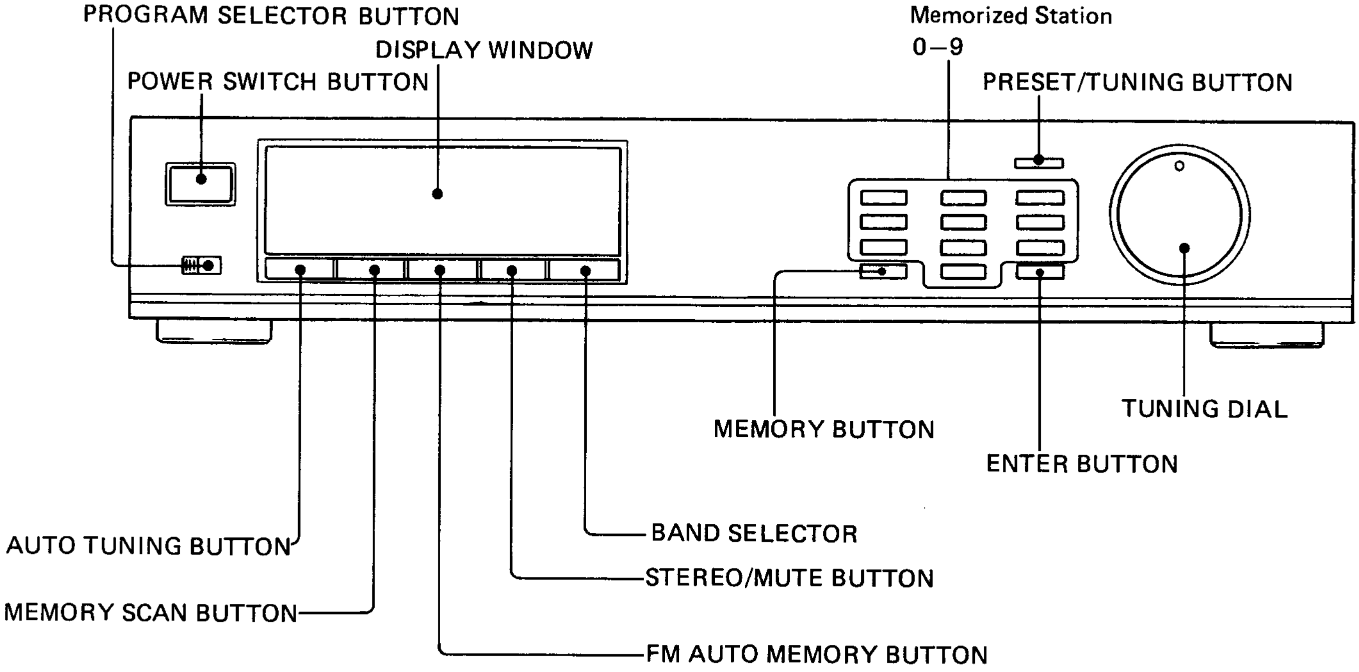
SECTION 1
GENERAL

LOCATION OF CONTROLS

(S100L)


BAND (FM/AM) SELECTOR
STEREO MUTE BUTTON
NUMERIC BUTTONS
POWER SWITCH BUTTON
ENTER BUTTON
DISPLAY WINDOW
AUTO TUNING BUTTON
TUNING (+) BUTTON
MEMORY SCAN BUTTON
TUNING (–) BUTTON
MEMORY BUTTON

(S300L)

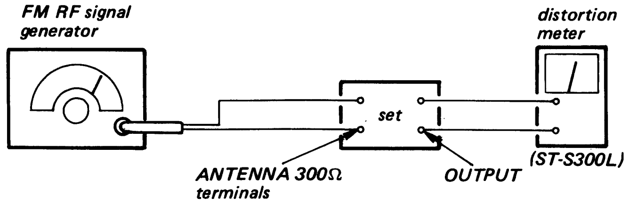

PROGRAM SELECTOR BUTTON
DISPLAY WINDOW
POWER SWITCH BUTTON
Memorized Station 0–9
PRESET/TUNING BUTTON
TUNING DIAL
MEMORY BUTTON
ENTER BUTTON
AUTO TUNING BUTTON
BAND SELECTOR
STEREO/MUTE BUTTON
MEMORY SCAN BUTTON
FM AUTO MEMORY BUTTON

SECTION 2

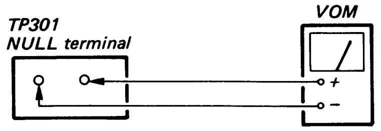
ADJUSTMENTS

FM DISCRIMINATOR ALIGNMENT (NULL and MONO Distortion)

Setting:


FM RF signal generator
distortion meter
set
ANTENNA 300Ω terminals
OUTPUT
(ST-S300L)

Carrier frequency: *98 MHz*
Modulation: *400 Hz, 75 kHz deviation (100%)*
Output level: *1 mV (60 dB)*

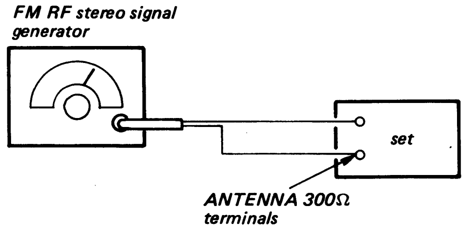

TP301
NULL terminal
VOM
+
−

Procedure:

1. Tune the set to 98 MHz.
2. Adjust the T301 for 0 V reading on VOM. ... NULL
3. Adjust T302 (ST-S300L ONLY) for a minimum reading on the distortion meter. ... MONO Distortion.
4. Repeat the primary-side and secondary-side alignments several times.

FM TUNING STOP LEVEL ADJUSTMENT

Setting:


FM RF stereo signal generator
set
ANTENNA 300Ω terminals

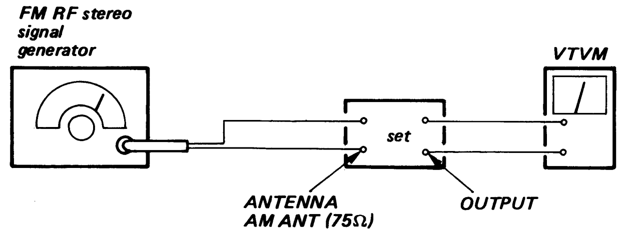
Carrier frequency: *98 MHz (25 dB)*
Output level: *17.8μV*
Modulation
Audio 400 Hz: *33.75 kHz deviation (45%)*
Sub channel 38 kHz: *33.75 kHz deviation (45%)*
Pilot signal 19 kHz: *7.5 kHz deviation (10%)*

Procedure:

1. Tune the set to 98 MHz by pressing the TUNING buttons.
2. Adjust RV301 so that the STEREO (FLT) goes on.

FM Stereo Separation Adjustment

Setting:


FM RF stereo signal generator
VTVM
set
ANTENNA
AM ANT (75Ω)
OUTPUT

Carrier frequency: *98 MHz*
Output level: *1 mV (60 dB)*
Modulation:
Audio 1 kHz: *33.7 kHz deviation (45%)*
Sub channel 38 kHz: *33.75 kHz deviation (45%)*
Pilot signal 18 kHz: *7.5 kHz deviation (10%)*
Mode: stereo

Procedure:

Tune the set to 98 MHz

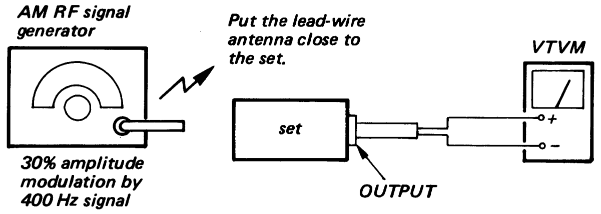
FM stereo signal generator output channel	VTVM connection	VTVM reading (dB)
L-CH	L-CH	Ⓐ
R-CH	L-CH	Ⓑ Adjust RV401 for minimum reading.
R-CH	R-CH	Ⓒ
L-CH	R-CH	Ⓓ Adjust RV401 for minimum reading.

L-CH Stereo separation: Ⓐ − Ⓑ
R-CH Stereo separation: Ⓒ − Ⓓ

The separations of both channels should be equal.

AM SECTION

Setting: BAND selector switch: MW or LW


AM RF signal generator
Put the lead-wire antenna close to the set.
VTVM
set
+
−
30% amplitude modulation by 400 Hz signal
OUTPUT

AM IF ADJUSTMENT

Procedure:

1. Tune the set to the SG signal.
2. Adjust for a maximum reading on VTVM.

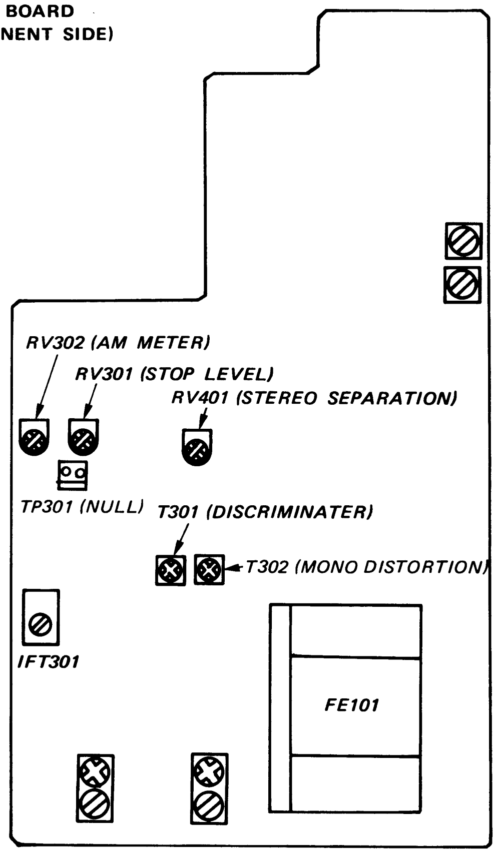
	SG and set frequency	Adjustment parts	Reading on VTVM
1	1,400 kHz	IFT301	Maximum

AM METER ADJUSTMENT

Procedure:

1. Tune the set to 216 kHz (94 dB)
2. Adjust the RV302 so that the 5 point segment of the signal meter goes on.
3. Tune the set to 999 kHz (94 dB).
4. Confirm that the 5 point segment of the signal meter goes on.

TUNER BOARD
(CONPONENT SIDE)


RV302 (AM METER)
RV301 (STOP LEVEL)
RV401 (STEREO SEPARATION)
TP301 (NULL)
T301 (DISCRIMINATER)
T302 (MONO DISTORTION)
IFT301
FE101

SECTION 3 DIAGRAMS

3-1. PRINTED WIRING BOARDS

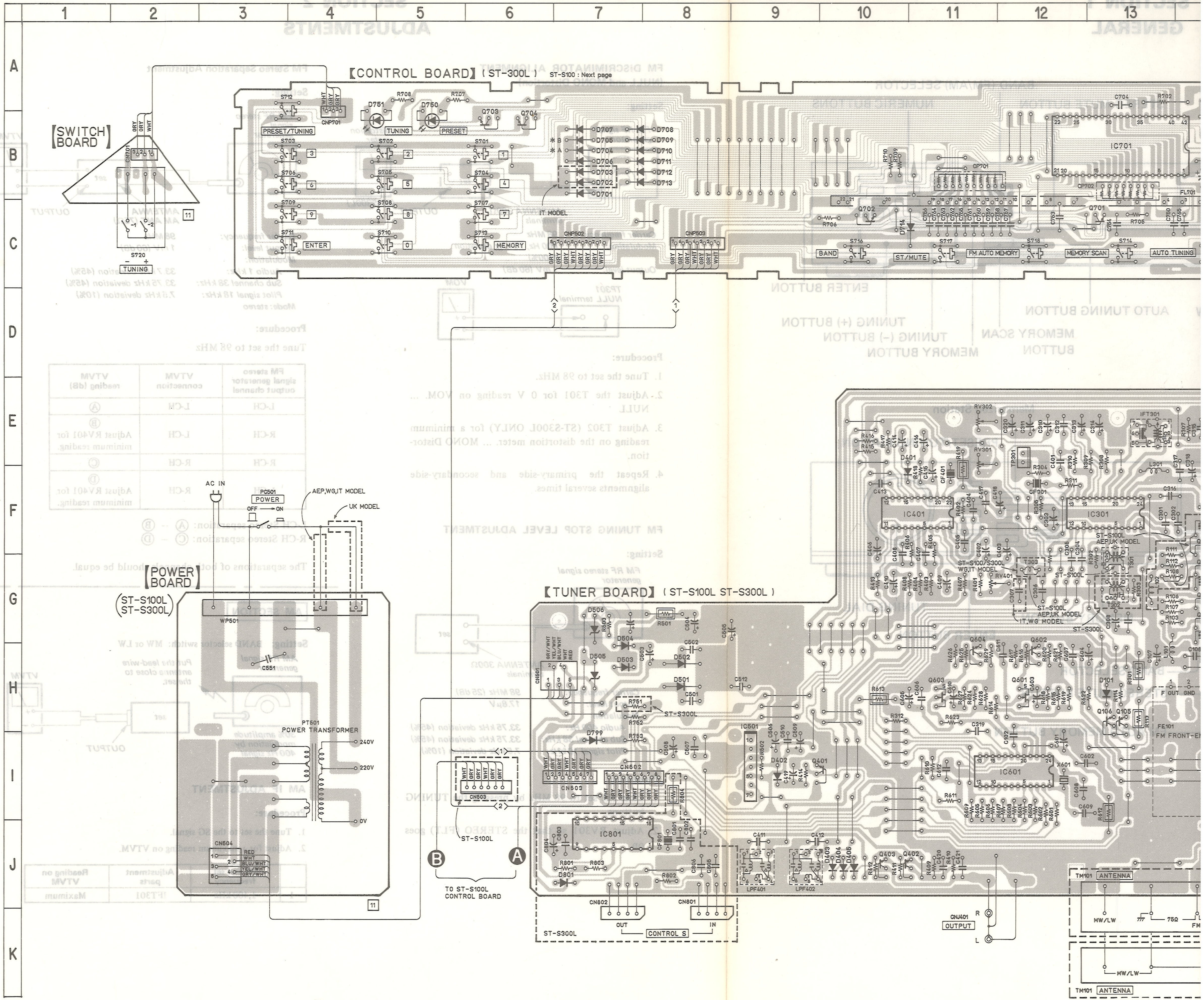
- See page 15 for semiconductor lead layouts.
- See page 13 for note on seramic filter (CF101, 102, 103).

Semiconductor Location

Ref. No.	Location	Ref. No.	Location
D101	H-13	IC301	F-13
D201	F-15	IC401	F-11
D401	F-10	IC501	I-9
D402	I-9	IC601	I-12
D403	J-10	IC701	B-13
D404	J-10	IC801 (ST-S300L)	J-7
D405	J-10		
D501	H-8		
D502	H-8	Q101	G-14
D503	H-8	Q102	G-14
D504	H-7	Q103 (ST-S300L ST-S100L IT•WG)	G-14
D505	H-7		
D506	G-7		
D701	B-7		
D702 (IT)	B-7	Q104 (ST-S300L ST-S100L IT•WG)	F-14
D703 (IT)	B-7		
D704	B-7	Q105	H-13
D705	B-7	Q106	H-13
D706	B-7	Q201	F-15
D707	B-7	Q202	E-15
D708	B-8	Q203	G-15
D709	B-8	Q204	G-15
D710	B-8	Q205	F-15
D711	B-8	Q206	E-15
D712	B-8	Q301	E-14
D713	B-8	Q401	I-9
D714	C-10	Q402	J-9
D715 (ST-S300L)	B-14	Q403	J-9
		Q601	H-12
D716 (ST-S300L)	B-14	Q602	H-12
		Q603	H-11
D750 (ST-S300L)	B-5	Q604	H-11
		Q701	C-13
D751 (ST-S300L)	B-4	Q702	C-10
		Q703	B-6
D799	I-7	Q704	B-6
D801 (ST-S300L)	J-7		

Note:

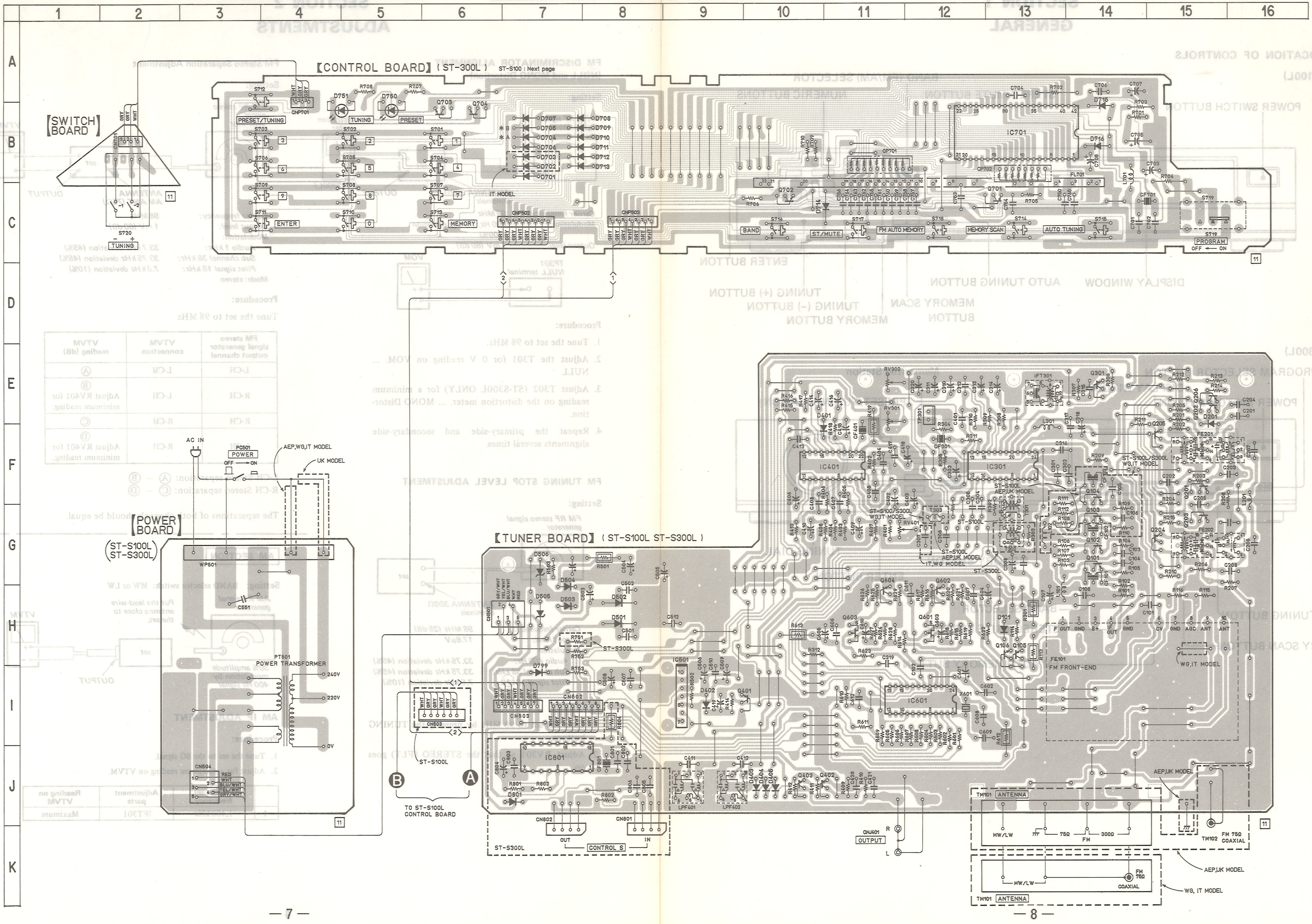
- ○— : parts extracted from the component side.
- [·]← : indicates side identified with part number.
- ▨ : Pattern on the side which is seen.


1
2
3
4
5
6
7
8
9
10
11
12
13
A
B
C
D
E
F
G
H
I
J
K
【CONTROL BOARD】(ST-300L)
ST-S100 : Next page
【SWITCH BOARD】
S720
TUNING
PRESET/TUNING
TUNING
PRESET
ENTER
MEMORY
IT MODEL
CNP701
CNP502
CNP503
IC701
BAND
ST/MUTE
FM AUTO MEMORY
MEMORY SCAN
AUTO TUNING
AC IN
PC501
POWER
OFF ON
AEP,WG,IT MODEL
UK MODEL
【POWER BOARD】
(ST-S100L ST-S300L)
WP501
PT501
POWER TRANSFORMER
240V
220V
0V
CN504
RED
WHT
BLU/WHT
YEL/WHT
GRY/WHT
【TUNER BOARD】(ST-S100L ST-S300L)
IC401
IC301
IC501
IC601
IC801
CN501
CN502
CN503
ST-S300L
ST-S100L
TO ST-S100L CONTROL BOARD
Ⓐ
Ⓑ
CN802
CN801
OUT
IN
CONTROL S
CNJ401
OUTPUT
R
L
TM101
ANTENNA
MW/LW
75Ω
FE101
FM FRONT-END
LPF401
LPF402
ST-S100/S300L WG,IT MODEL
AEP,UK MODEL
IT,WG MODEL

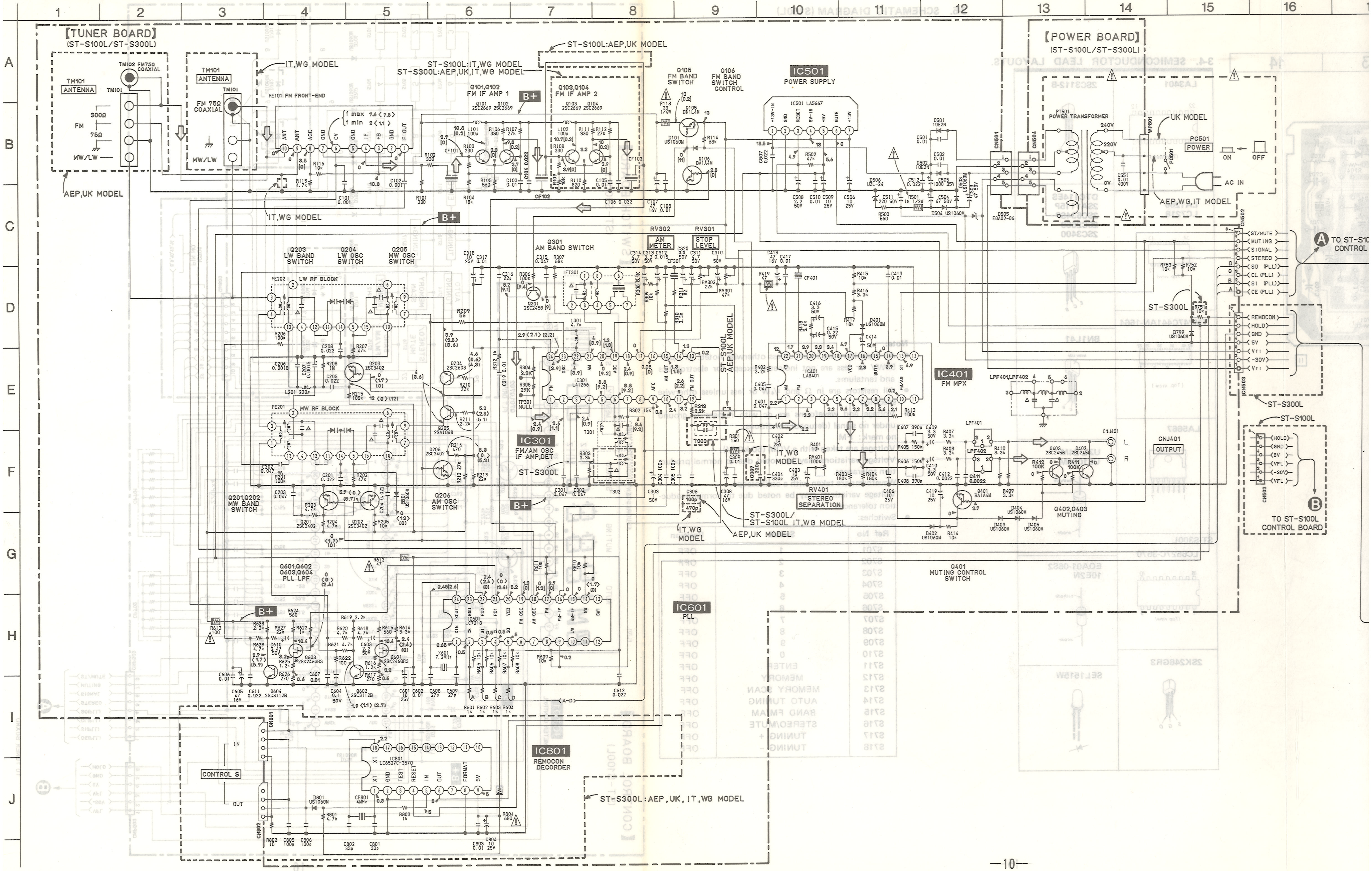
ts.

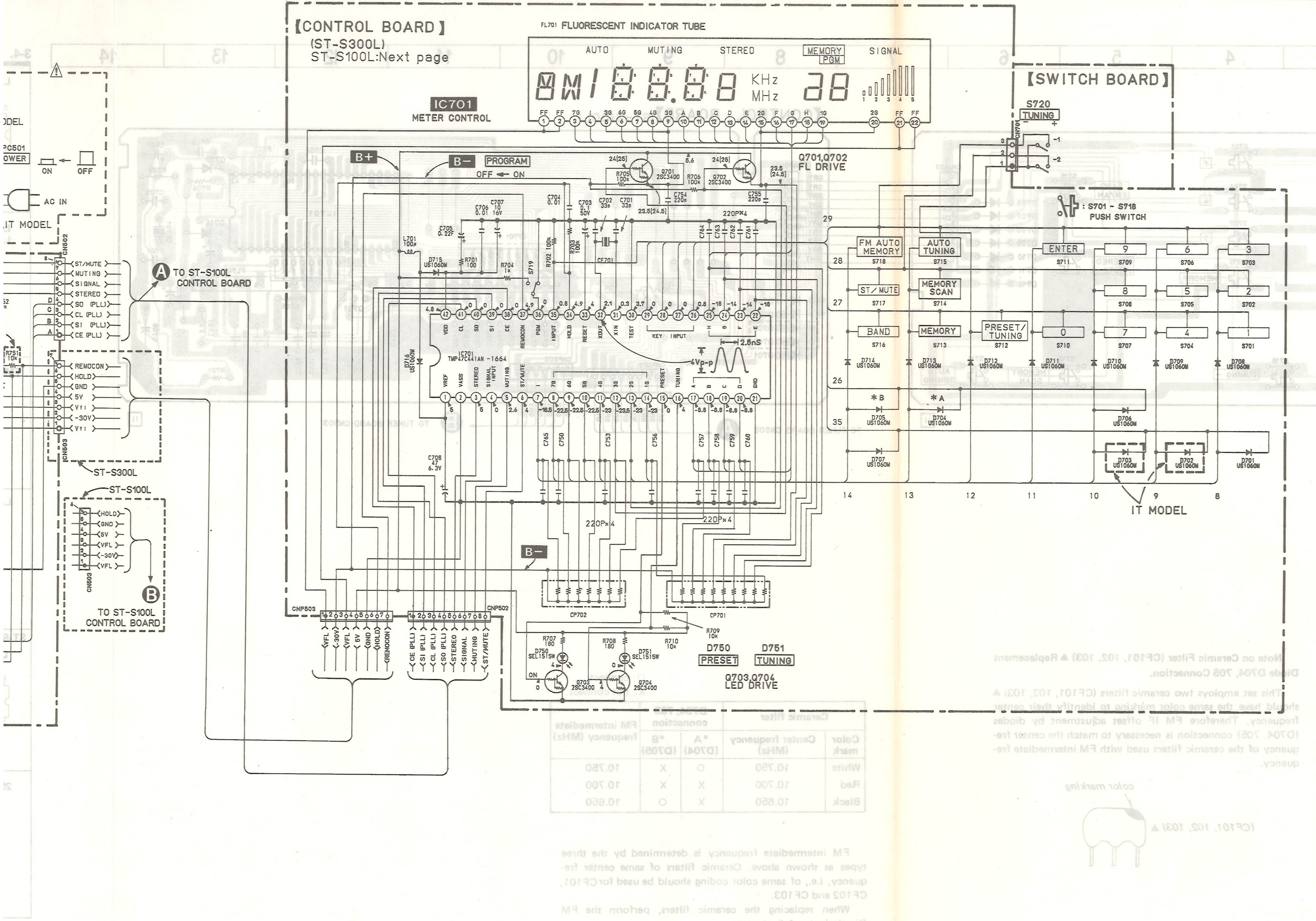
101, 102, 103).

ide.
er.


【CONTROL BOARD】(ST-300L)
ST-S100 : Next page
【SWITCH BOARD】
【POWER BOARD】
(ST-S100L ST-S300L)
【TUNER BOARD】(ST-S100L ST-S300L)
PRESET/TUNING
TUNING
PRESET
ENTER
MEMORY
BAND
ST/MUTE
FM AUTO MEMORY
MEMORY SCAN
AUTO TUNING
PROGRAM
OFF ← ON
IC701
FL701
CN701
CNP701
CNP502
CNP503
IT MODEL
S720
TUNING
AC IN
PC501
POWER
OFF — ON
AEP,WG,IT MODEL
UK MODEL
WP501
PT501
POWER TRANSFORMER
240V
220V
0V
CN504
RED
WHT
BLU/WHT
YEL/WHT
GRY/WHT
CN503
CN502
ST-S100L
TO ST-S100L CONTROL BOARD
Ⓐ
Ⓑ
IC801
CN802
CN801
OUT
IN
CONTROL S
ST-S300L
IC501
IC401
IC301
IC601
LPF401
LPF402
CN401
OUTPUT
R
L
ST-S100/S300L WG,IT MODEL
ST-S300L AEP,UK MODEL
ST-S100L/S300L WG,IT MODEL
FE101
FM FRONT-END
F OUT
GND
B+
OUT
CV
GND
ASC
ANT
ANT
WG,IT MODEL
AEP,UK MODEL
TM101
ANTENNA
MW/LW
75Ω
FM
300Ω
TM102
FM 75Ω COAXIAL
AEP,UK MODEL
FM 75Ω
COAXIAL
WG, IT MODEL
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
A
B
C
D
E
F
G
H
I
J
K

3-2. SCHEMATIC DIAGRAM


【TUNER BOARD】
(ST-S100L/ST-S300L)
TM101 ANTENNA
TM102 FM75Ω COAXIAL
FM 300Ω 75Ω
MW/LW
AEP,UK MODEL
IT,WG MODEL
FM 75Ω COAXIAL
FE101 FM FRONT-END
ST-S100L:AEP,UK MODEL
ST-S100L:IT,WG MODEL
ST-S300L:AEP,UK,IT,WG MODEL
Q101,Q102 FM IF AMP 1
Q103,Q104 FM IF AMP 2
Q105 FM BAND SWITCH
Q106 FM BAND SWITCH CONTROL
IC501 POWER SUPPLY
IC501 LA5667
【POWER BOARD】
(ST-S100L/ST-S300L)
PT501 POWER TRANSFORMER
UK MODEL
PC501 POWER
ON OFF
AC IN
AEP,WG,IT MODEL
240V 220V 0V
Q203 LW BAND SWITCH
Q204 LW OSC SWITCH
Q205 MW OSC SWITCH
FE202 LW RF BLOCK
FE201 MW RF BLOCK
Q301 AM BAND SWITCH
RV302 AM METER
RV301 STOP LEVEL
IC301 FM/AM OSC IF AMP,DET
IC301 LA1266
ST-S300L
ST-S100L AEP,UK MODEL
Q201,Q202 MW BAND SWITCH
Q206 AM OSC SWITCH
IC401 FM MPX
IC401 LA3401
RV401 STEREO SEPARATION
IT,WG MODEL
AEP,UK MODEL
ST-S300L/ST-S100L IT,WG MODEL
LPF401,LPF402
CNJ401 OUTPUT
L R
Q402,Q403 MUTING
Q401 MUTING CONTROL SWITCH
ST/MUTE
MUTING
SIGNAL
STEREO
SO (PLL)
CL (PLL)
SI (PLL)
CE (PLL)
REMOCON
HOLD
GND
5V
VFL
-30V
VFL
A TO ST-S100L CONTROL
B TO ST-S100L CONTROL BOARD
ST-S100L
Q601,Q602 Q603,Q604 PLL LPF
IC601 PLL
IC601 LC7218
X601 7.2MHz
IC801 REMOCON DECODER
IC801 LC6527C-3570
CONTROL S
IN OUT
CF801 4MHz
ST-S300L:AEP,UK,IT,WG MODEL
B+


【CONTROL BOARD】
(ST-S300L)
ST-S100L:Next page
FL701 FLUORESCENT INDICATOR TUBE
AUTO
MUTING
STEREO
MEMORY
PGM
SIGNAL
KHz
MHz
IC701
METER CONTROL
IC701
TMP47C441AN-1664
B+
B−
PROGRAM
OFF ← ON
Q701,Q702
FL DRIVE
Q701 2SC3400
Q702 2SC3400
S719
CF701
220P×4
CP701
CP702
【SWITCH BOARD】
S720
TUNING
S701 - S718
PUSH SWITCH
FM AUTO MEMORY
S718
AUTO TUNING
S715
ST/MUTE
S717
MEMORY SCAN
S714
BAND
S716
MEMORY
S713
PRESET/TUNING
S712
ENTER
S711
0
S710
1
S701
2
S702
3
S703
4
S704
5
S705
6
S706
7
S707
8
S708
9
S709
IT MODEL
D750
PRESET
D751
TUNING
Q703,Q704
LED DRIVE
Q703 2SC3400
Q704 2SC3400
D750 SEL1515W
D751 SEL1515W
CNP503
CNP502
CN502
CN503
A TO ST-S100L CONTROL BOARD
B TO ST-S100L CONTROL BOARD
ST-S300L
ST-S100L
PC501 POWER
ON
OFF
AC IN
IT MODEL
ST/MUTE
MUTING
SIGNAL
STEREO
SO (PLL)
CL (PLL)
SI (PLL)
CE (PLL)
REMOCON
HOLD
GND
5V
Vf1
-30V
VFL
4Vp-p
2.5nS

Note:

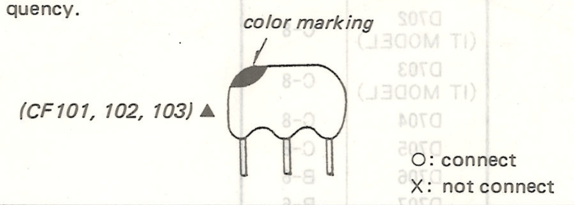
- All capacitors are in μF unless otherwise noted. pF: μμF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and ¼W or less unless otherwise specified.
- △ : internal component.
- ▭ : nonflammable resistor.
- **B+** : B+ Line
- **B−** : B- Line
- ▭ : adjustment for repair.
- Voltage and waveforms are dc with respect to ground under no-signal (detuned) conditions.
  no mark : FM
  ( ) : LW
  < > : MW
  [ ] : MW/LW
- Voltages are taken with a VOM (50 kΩ/V).
  Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope.
  Voltage variations may be noted due to normal production tolerances.
- Signal path.
  ⇨ : FM
- Switches:

Ref. No.	Switch	Position
PC501	POWER	OFF
S701 – S718	KEY BOARD SWITCH	OFF
ST-S300L ONLY		
S719	PROGRAM	ON
S720	TUNING	–

Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Note on Ceramic Filter (CF101, 102, 103) ▲ Replacement Diode D704, 705 Connection.

This set employs two ceramic filters (CF101, 102, 103) ▲ should have the same color marking to identify their center frequency. Therefore FM IF offset adjustment by diodes (D704, 705) connection is necessary to match the center frequency of the ceramic filters used with FM intermediate frequency.


color marking
(CF101, 102, 103) ▲

○: connect
X: not connect

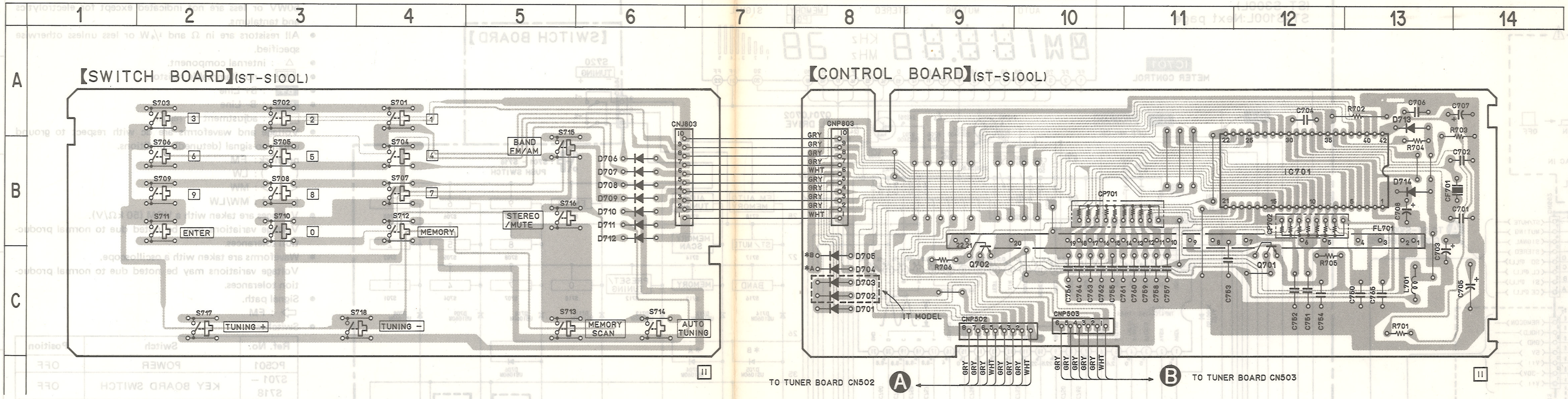
Ceramic filter		D704, 705 connection		FM intermediate frequency (MHz)
Color mark	Center frequency (MHz)	*A (D704)	*B (D705)	
White	10.750	○	X	10.750
Red	10.700	X	X	10.700
Black	10.650	X	○	10.650

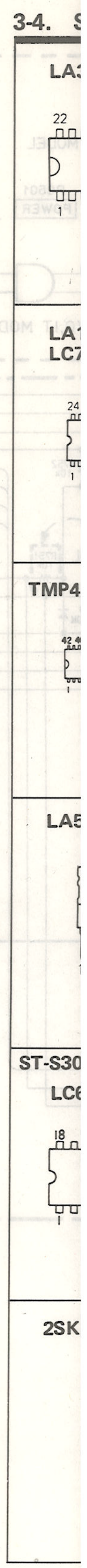
FM intermediate frequency is determined by the three types as shown above. Ceramic filters of same center frequency, i.e., of same color coding should be used for CF101, CF102 and CF103.

When replacing the ceramic filters, perform the FM Discriminator Adjustment.

▲: S100L (AEP, UK)–CF101, 102

3-3. PRINTED WIRING BOARDS (S100L)


1
2
3
4
5
6
7
8
9
10
11
12
13
14
A
B
C
【SWITCH BOARD】(ST-S100L)
S703
S702
S701
S706
S705
S704
S709
S708
S707
S711
S710
S712
S715
S716
S717
S718
S713
S714
ENTER
BAND FM/AM
STEREO /MUTE
MEMORY
TUNING +
TUNING −
MEMORY SCAN
AUTO TUNING
CNJ803
D706
D707
D708
D709
D710
D711
D712
【CONTROL BOARD】(ST-S100L)
CNP803
GRY
WHT
IC701
CP701
CP702
FL701
Q701
Q702
R701
R702
R703
R704
R705
R706
C701
C702
C703
C704
C705
C706
C707
C708
CF701
L701
D701
D702
D703
D704
D705
D713
D714
*A
*B
IT MODEL
CNP502
CNP503
TO TUNER BOARD CN502
A
B
TO TUNER BOARD CN503

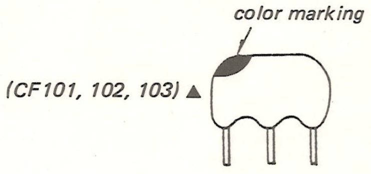

3-4.
LA
LA1
LC7
TMP4
LA5
ST-S30
LC6
2SK

• Semiconductor Location

Ref. No.	Location
D701	C-8
D702 (IT MODEL)	C-8
D703 (IT MODEL)	C-8
D704	C-8
D705	C-8
D706	B-6
D707	B-6
D708	B-6
D709	B-6
D710	B-6
D711	B-6
D712	B-6
D713	A-13
D714	B-13
IC701	B-12
Q701	C-12
Q702	C-9

Note on Ceramic Filter (CF101, 102, 103) ▲ Replacement Diode D704, 705 Connection.

This set employs two ceramic filters (CF101, 102, 103) ▲ should have the same color marking to identify their center frequency. Therefore FM IF offset adjustment by diodes (D704, 705) connection is necessary to match the center frequency of the ceramic filters used with FM intermediate frequency.


color marking
(CF101, 102, 103) ▲

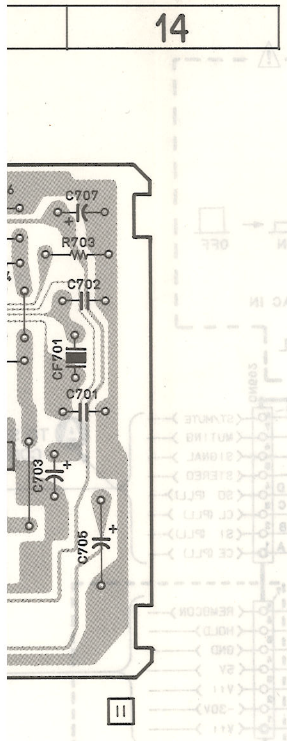
O: connect
X: not connect

Ceramic filter		D704, 705 connection		FM intermediate frequency (MHz)
Color mark	Center frequency (MHz)	*A (D704)	*B (D705)	
White	10.750	○	X	10.750
Red	10.700	X	X	10.700
Black	10.650	X	○	10.650

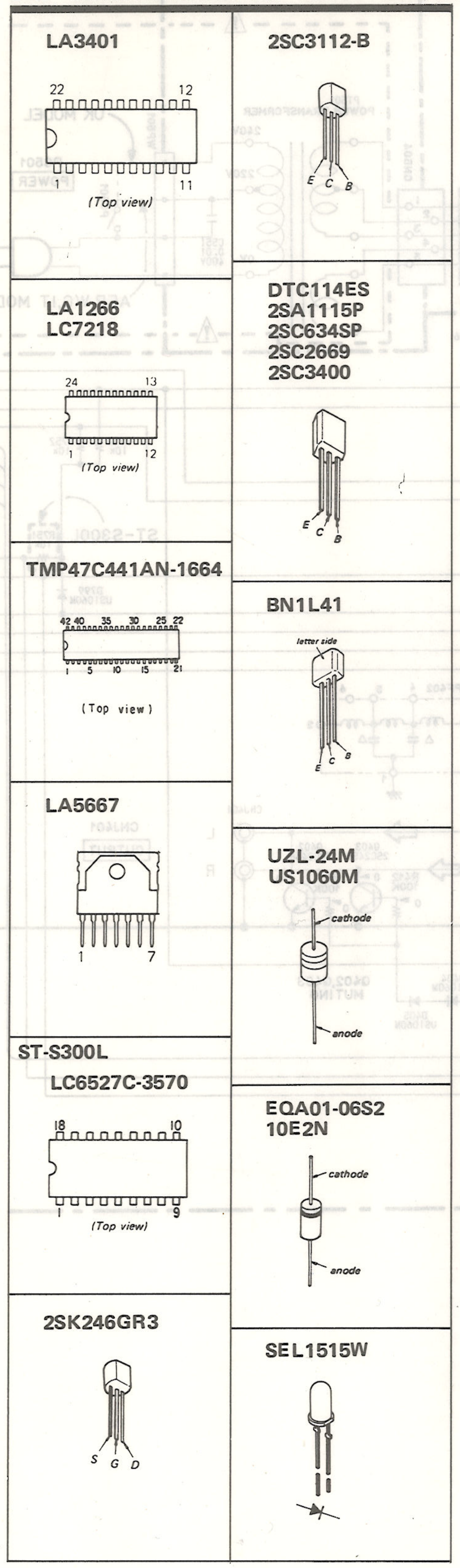
FM intermediate frequency is determined by the three types as shown above. Ceramic filters of same center frequency, i.e., of same color coding should be used for CF101, CF102 and CF103.

When replacing the ceramic filters, perform the FM Discriminator Adjustment.

▲: S100L (AEP, UK)−CF101, 102


14
C707
R703
C702
CF701
C701
C703
C706

3-4. SEMICONDUCTOR LEAD LAYOUTS.

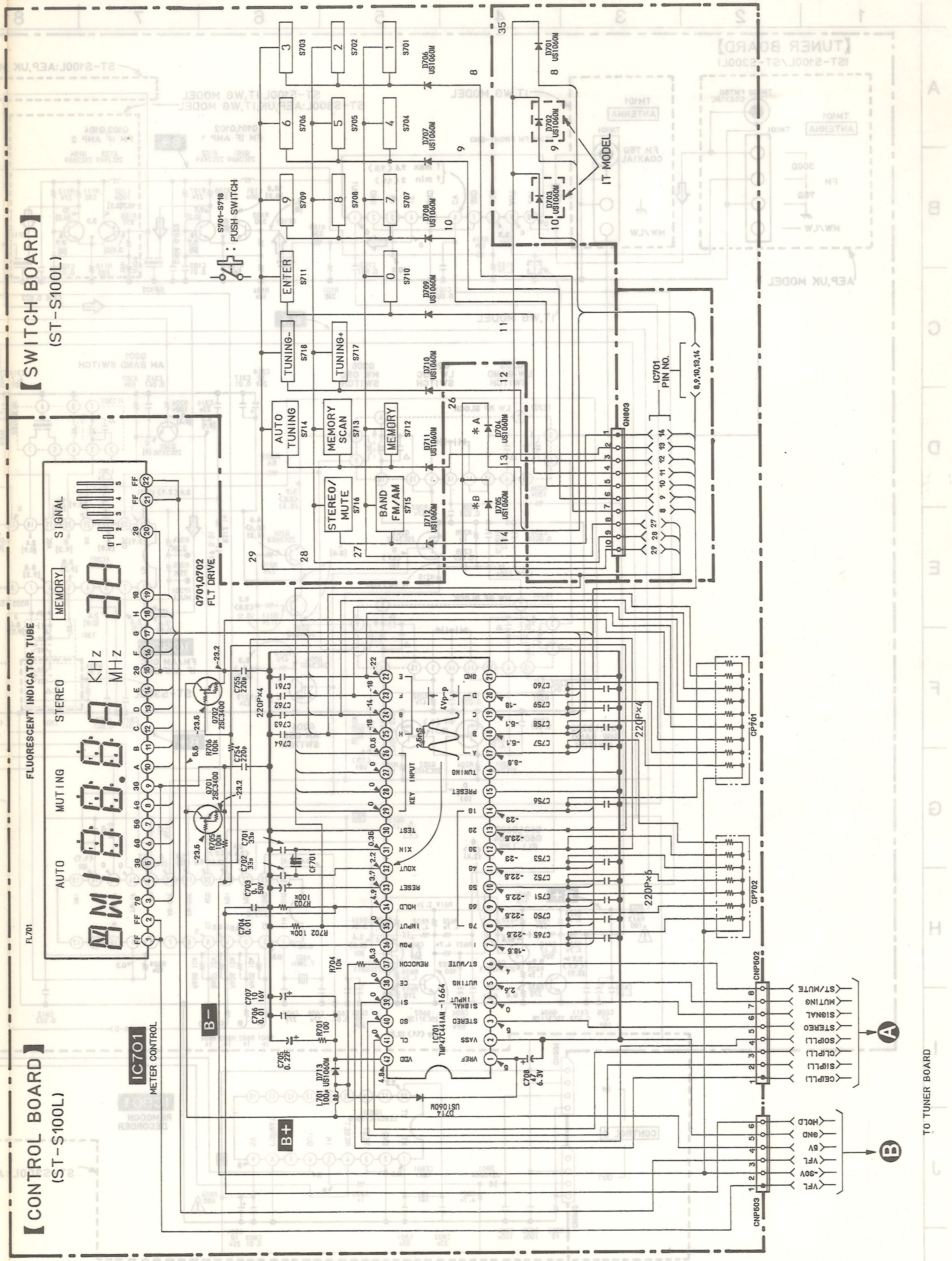

LA3401
22
12
1
11
(Top view)
2SC3112-B
E C B
LA1266
LC7218
24
13
1
12
(Top view)
DTC114ES
2SA1115P
2SC634SP
2SC2669
2SC3400
E C B
TMP47C441AN-1664
42 40 35 30 25 22
1 5 10 15 21
(Top view)
BN1L41
letter side
E C B
LA5667
1
7
UZL-24M
US1060M
cathode
anode
ST-S300L
LC6527C-3570
18
10
1
9
(Top view)
EQA01-06S2
10E2N
cathode
anode
2SK246GR3
S G D
SEL1515W

3-5. SCHEMATIC DIAGRAM (S100L)

Note:

- All capacitors are in μF unless otherwise noted. pF: μμF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4W or less unless otherwise specified
- Voltage and waveforms are dc with respect to ground under no signal (detuned) conditions.
  no mark: FM
- Voltages are taken with a VOM (50 kΩ/V).
  Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope.
  Voltage variations may be noted due to normal production tolerances.
- Switches:

Ref No	Switch	Position
S701	1	OFF
S702	2	OFF
S703	3	OFF
S704	4	OFF
S705	5	OFF
S706	6	OFF
S707	7	OFF
S708	8	OFF
S709	9	OFF
S710	0	OFF
S711	ENTER	OFF
S712	MEMORY	OFF
S713	MEMORY SCAN	OFF
S714	AUTO TUNING	OFF
S715	BAND FM/AM	OFF
S716	STEREO/MUTE	OFF
S717	TUNING +	OFF
S718	TUNING −	OFF


【SWITCH BOARD】
(ST-S100L)
【CONTROL BOARD】
(ST-S100L)
S701–S718
PUSH SWITCH
S701
S702
S703
S704
S705
S706
S707
S708
S709
S710
ENTER
S711
TUNING−
S718
TUNING+
S717
AUTO TUNING
S714
MEMORY SCAN
S713
MEMORY
S712
STEREO/MUTE
S716
BAND FM/AM
S715
D701–D714
US1060M
IT MODEL
IC701 PIN NO.
CN803
FLUORESCENT INDICATOR TUBE
FL701
AUTO
MUTING
STEREO
SIGNAL
MEMORY
KHz
MHz
Q701,Q702
FLT DRIVE
Q701
2SC3400
Q702
2SC3400
IC701
TMP47C441AN-1664
IC701
METER CONTROL
B−
B+
CF701
C701
C702
C703
C704
C705
C706
C707
C708
R701
R702
R703
R704
R705
R706
L701
D713
D714
C750
C751
C752
C753
C756
C757
C758
C759
C760
C761
C762
C763
C764
C765
220P×4
220P×5
CP701
CP702
VDD
VREF
VASS
STEREO
SIGNAL INPUT
MUTING
ST/MUTE
RESET
XIN
XOUT
TEST
HOLD
INPUT
PRESET
TUNING
KEY INPUT
GND
CNP602
CNP603
ST/MUTE
MUTING
SIGNAL
STEREO
SO(PLL)
CL(PLL)
SI(PLL)
CE(PLL)
HOLD
GND
5V
VFL
-30V
VFL
A
B
TO TUNER BOARD

SECTION 4
EXPLODED VIEWS

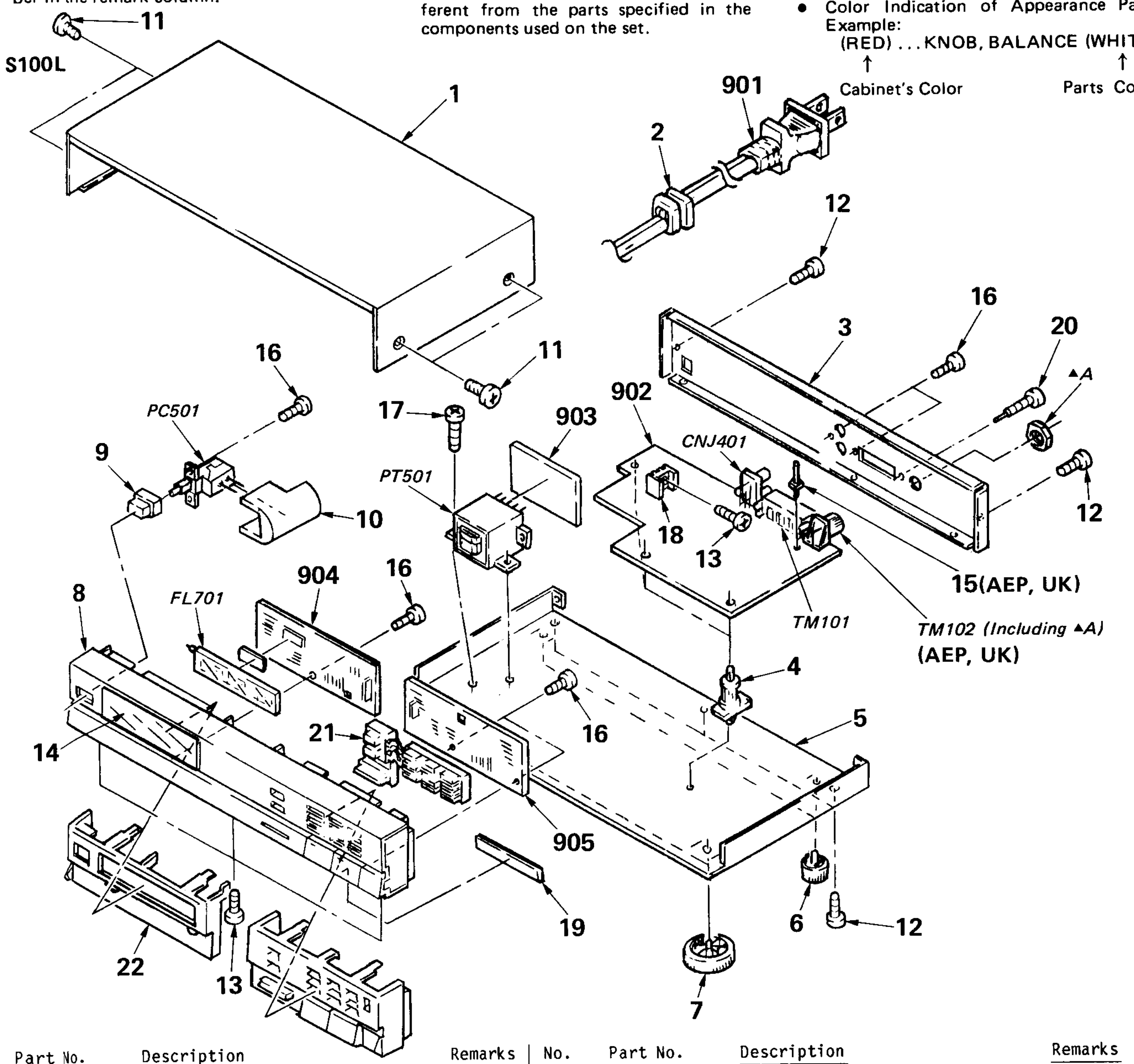
NOTE:

- The mechanical parts with no reference number in the exploded views are not supplied.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- Due to standardization, parts with part number suffix -XX and -X may be different from the parts specified in the components used on the set.

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.

- Color Indication of Appearance Parts
  Example:
  (RED) . . . KNOB, BALANCE (WHITE)
  ↑ Cabinet's Color ↑ Parts Color

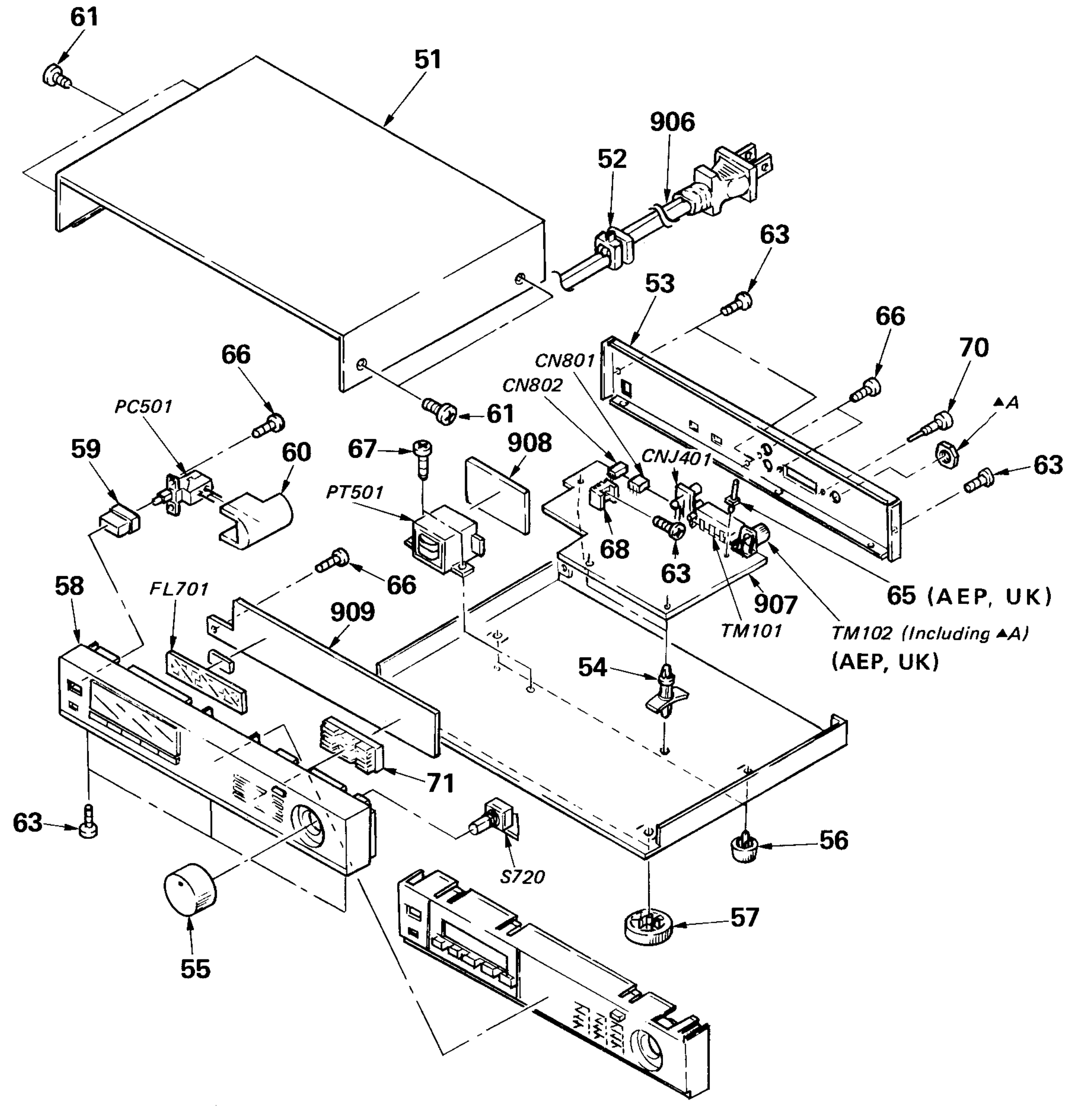
(1). S100L



No.	Part No.	Description	Remarks
1	4-905-463-41	CASE	
2	*3-703-244-00	BUSHING (2104), CORD	
3	*4-923-413-21	(S100L;AEP)...PANEL, BACK	
	*4-923-413-41	(S100L;UK)....PANEL, BACK	
	*4-923-413-51	(S100L;WG)....PANEL, BACK	
	*4-923-413-61	(S100L;IT)....PANEL, BACK	
4	*3-346-265-11	HOLDER, PC BOARD	
5	*4-904-481-11	CHASSIS	
6	X-3337-104-1	FOOT ASSY, ORNAMENTAL	
7	X-4864-303-0	FOOT ASSY	
8	4-917-029-31	PANEL, FRONT	
9	4-917-460-01	KNOB, POWER	
10	3-575-524-00	COVER, POWER SWITCH	
11	4-886-821-01	SCREW, M3 CASE	
12	3-703-685-11	SCREW (+BV 3X8)	
13	7-682-548-04	SCREW +BVTT 3X8 (S)	
14	4-923-423-01	PLATE, INDICATION	
15	1-535-114-31	(AEP,UK)...TERMINAL 1P	
16	7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S	
17	7-682-549-04	SCREW +BVTT 3X10	
18	*4-363-146-51	HEAT SINK, V.OUT	

No.	Part No.	Description	Remarks
19	*4-911-291-11	CUSHION	
20	3-704-242-01	SCREW, TERMINAL, + BVTP CLAW	
21	4-917-025-01	BUTTON	
22	*4-923-424-01	PANEL (BASE A)	
901	⚠.1-555-750-00	(S100L;AEP,IT,WG)...CORD, POWER	
	⚠.1-556-562-00	(S100L;UK).........CORD, POWER	
902	*A-4351-693-A	(S100L;IT,WG)....MOUNTED PCB, TUNER	
	*A-4351-692-A	(S100L;AEP,UK)...MOUNTED PCB, TUNER	
903	*1-627-661-11	PC BOARD, POWER	
904	*1-627-664-11	(S100L)...PC BOARD, CONTROL	
905	*1-627-665-11	(S100L)...PC BOARD, SWITCH	
CNJ401	1-565-352-11	JACK, PIN 2P (OUTPUT)	
FL701	1-519-460-11	INDICATOR TUBE, FLUORESCENT	
PC501⚠.	1-553-318-00	SWITCH, PUSH (AC POWER)(1 KEY)	
PT501⚠.	1-449-400-11	TRANSFORMER, POWER	
TM101	*1-536-708-00	(AEP,UK)...TERMINAL BOARD, PUSH 4P	
TM101	*1-537-138-21	(IT,WG)....TERMINAL BOARD (ANT)	
TM102	1-563-199-11	(AEP,UK)...CONNECTOR, PAL	

(2). S300L



No.	Part No.	Description	Remarks
51	4-923-420-01	CASE	
52	*3-703-244-00	BUSHING (2104), CORD	
53	*4-923-412-21	(S300L;AEP)...PANEL, BACK	
	*4-923-413-41	(S300L;UK)....PANEL, BACK	
	*4-923-413-51	(S300L;WG)....PANEL, BACK	
	*4-923-413-61	(S300L;IT)....PANEL, BACK	
54	*3-346-265-11	HOLDER, PC BOARD	
55	X-4886-029-1	KNOB (45) ASSY	
56	X-3337-104-1	FOOT ASSY, ORNAMENTAL	
57	X-4864-303-0	FOOT ASSY	
58	4-923-421-11	PANEL, FRONT	
59	4-917-460-01	KNOB, POWER	
60	3-575-524-00	COVER, POWER SWITCH	
61	3-704-366-01	SCREW (CASE) (M3X8)	
63	7-682-548-04	SCREW +BVTT 3X8 (S)	
65	*1-535-114-31	(S300L;AEP,UK)...TERMINAL	
66	7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S	
67	7-682-549-04	SCREW +BVTT 3X10	
68	*4-363-146-51	HEAT SINK, V.OUT	
70	3-704-242-01	SCREW, TERMINAL, + BVTP CLAW	
71	4-917-025-01	BUTTON	

No.	Part No.	Description	Remarks
906	⚠.1-555-750-00	(S300L;AEP,IT,WG)...CORD, POWER	
	⚠.1-556-562-00	(S300L;UK).........CORD, POWER	
907	*A-4351-686-A	MOUNTED PCB, TUNER	
908	*1-627-661-11	PC BOARD, POWER	
909	*1-627-662-11	PC BOARD, CONTROL	
CN801	1-564-980-11	(S300L)...PIN, CONNECTOR 4P (CONTROL S IN)	
CN802	1-564-980-11	(S300L)...PIN, CONNECTOR 4P (CONTORL S OUT)	
CNJ401	1-565-352-11	JACK, PIN 2P (OUTPUT)	
FL701	1-519-460-11	INDICATOR TUBE, FLUORESCENT	
PC501⚠.	1-553-318-00	SWITCH, PUSH (AC POWER)(1 KEY)	
PT501⚠.	1-449-400-11	TRANSFORMER, POWER	
TM101	*1-536-708-00	(AEP,UK)...TERMINAL BOARD, PUSH 4P	
TM101	*1-537-138-21	(IT,WG)....TERMINAL BOARD (ANT)	
TM102	1-563-199-11	(AEP,UK)...CONNECTOR, PAL	

Note: The components identified by mark ⚠ or doted line with mark ⚠ are critical for safety. Replace only with part number specified.

SECTION 5
ELECTRICAL PARTS LIST

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- If there are two or more same circuits in a set such as a stereophonic machine, only typical circuit parts may be indicated and capacitors and resistors in other same circuits may be omitted.

CAPACITORS:
MF: μF, PF: μμF.

RESISTORS
- All resistors are in ohms.
- F: nonflammable

COILS
- MMH: mH, UH: μH

SEMICONDUCTORS
In each case, U: μ, for example:
UA...: μA..., UPA...: μPA...,
UPC...: μPC, UPD...: μPD...

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Ref.No.	Part No.	Description			
901	⚠ .1-555-750-00	(S100L;AEP,IT,WG)...CORD, POWER			
	⚠ .1-556-562-00	(S100L;UK)..........CORD, POWER			
902	*A-4351-693-A	(S100L;IT,WG)....MOUNTED PCB, TUNER			
	*A-4351-692-A	(S100L;AEP,UK)...MOUNTED PCB, TUNER			
903	*1-627-661-11	PC BOARD, POWER			
904	*1-627-664-11	(S100L)...PC BOARD, CONTROL			
905	*1-627-665-11	(S100L)...PC BOARD, SWITCH			
906	⚠ .1-555-750-00	(S300L;AEP,IT,WG)...CORD, POWER			
	⚠ .1-556-562-00	(S300L;UK)..........CORD, POWER			
907	*A-4351-686-A	MOUNTED PCB, TUNER			
908	*1-627-661-11	PC BOARD, POWER			
909	*1-627-662-11	PC BOARD, CONTROL			
C101	1-162-294-31	CERAMIC	0.001MF	10%	50V
C102	1-162-294-31	CERAMIC	0.001MF	10%	50V
C103	1-161-379-00	CERAMIC	0.01MF	30%	16V
C104	1-101-005-00	CERAMIC	0.022MF		50V
C105	1-161-379-00	(S300L/S100L;IT,WG) ...CERAMIC	0.01MF	30%	16V
C106	1-101-005-00	(S300L/S100L;IT,WG) ...CERAMIC	0.022MF		50V
C107	1-123-332-00	ELECT	47MF	20%	16V
C108	1-161-379-00	CERAMIC	0.01MF	30%	16V
C201	1-101-005-00	CERAMIC	0.022MF		50V
C202	1-101-006-00	CERAMIC	0.047MF		50V
C203	1-101-006-00	CERAMIC	0.047MF		50V
C204	1-101-005-00	CERAMIC	0.022MF		50V
C205	1-101-005-00	CERAMIC	0.022MF		50V
C206	1-102-120-00	CERAMIC	0.0018MF	10%	50V
C207	1-102-119-00	CERAMIC	0.0015MF	10%	50V
C208	1-101-005-00	CERAMIC	0.022MF		50V
C301	1-101-006-00	CERAMIC	0.047MF		50V
C302	1-101-006-00	CERAMIC	0.047MF		50V
C303	1-124-499-11	ELECT	1MF	20%	50V
C304	1-162-282-31	CERAMIC	100PF	10%	50V
C305	1-162-282-31	CERAMIC	100PF	10%	50V
C306	1-162-282-31	(AEP,UK)...CERAMIC	100PF		
C306	1-162-290-31	(IT,WG)....CERAMIC	470PF	10%	50V
C307	1-162-286-31	(IT,WG)....CERAMIC	220PF	10%	50V
C308	1-123-332-00	ELECT	47MF	20%	16V
C309	1-161-379-00	CERAMIC	0.01MF	30%	16V
C310	1-123-611-00	ELECT	1MF	20%	50V
C311	1-126-163-11	ELECT	4.7MF	20%	50V
C312	1-130-485-00	MYLAR	0.015MF	5%	50V
C313	1-126-162-11	ELECT	3.3MF	20%	50V
C314	1-126-163-11	ELECT	4.7MF	20%	50V
C315	1-101-006-00	CERAMIC	0.047MF		50V
C316	1-162-207-31	CERAMIC	22PF	5%	50V
C317	1-161-379-00	CERAMIC	0.01MF	30%	16V
C318	1-123-356-00	ELECT	10MF	20%	25V
C319	1-161-379-00	CERAMIC	0.01MF	30%	16V
C320	1-123-613-00	ELECT	3.3MF	20%	50V
C401	1-108-812-11	MYLAR	0.047MF	5%	50V
C402	1-123-356-00	ELECT	10MF	20%	25V
C403	1-123-356-00	ELECT	10MF	20%	25V
C404	1-162-288-31	CERAMIC	330PF	10%	50V
C405	1-108-812-11	MYLAR	0.047MF	5%	50V
C406	1-123-356-00	ELECT	10MF	20%	25V
C407	1-162-289-31	CERAMIC	390PF	10%	50V
C408	1-162-289-31	CERAMIC	390PF	10%	50V
C409	1-123-382-00	ELECT	3.3MF	20%	50V
C410	1-123-382-00	ELECT	3.3MF	20%	50V
C411	1-161-375-00	CERAMIC	0.0022MF	30%	16V
C412	1-161-375-00	CERAMIC	0.0022MF	30%	16V
C413	1-161-379-00	CERAMIC	0.01MF	30%	16V
C414	1-124-499-11	ELECT	1MF	20%	50V
C415	1-124-464-11	ELECT	0.22MF	20%	50V
C416	1-123-382-00	ELECT	3.3MF	20%	50V
C417	1-161-379-00	CERAMIC	0.01MF	30%	16V
C418	1-123-332-00	ELECT	47MF	20%	16V
C419	1-123-356-00	ELECT	10MF	20%	25V
C501	1-101-004-00	CERAMIC	0.01MF		50V
C502	1-101-004-00	CERAMIC	0.01MF		50V
C503	1-124-910-11	ELECT	47MF	20%	50V
C504	1-124-910-11	ELECT	47MF	20%	50V
C505	1-126-105-11	ELECT	1000MF	20%	35V
C506	1-123-356-00	ELECT	10MF	20%	25V
C507	1-101-005-00	CERAMIC	0.022MF		50V
C508	1-124-925-11	ELECT	2.2MF	20%	50V
C509	1-123-356-00	ELECT	10MF	20%	25V
C510	1-161-379-00	CERAMIC	0.01MF	30%	16V
C511	1-124-911-11	ELECT	220MF	20%	50V
C512	1-101-005-00	CERAMIC	0.022MF		50V
C551	⚠.1-161-744-00	CERAMIC	0.01MF		400V
C601	1-123-356-00	ELECT	10MF	20%	25V
C602	1-161-379-00	CERAMIC	0.01MF	30%	16V
C603	1-124-925-11	ELECT	2.2MF	20%	50V
C604	1-124-463-00	ELECT	0.1MF	20%	50V
C605	1-123-332-00	ELECT	47MF	20%	16V
C606	1-161-379-00	CERAMIC	0.01MF	30%	16V
C607	1-101-004-00	CERAMIC	0.01MF		50V
C608	1-102-961-00	CERAMIC	27PF	5%	50V
C609	1-102-961-00	CERAMIC	27PF	5%	50V
C610	1-124-902-00	ELECT	0.47MF	20%	50V
C611	1-101-005-00	CERAMIC	0.022MF		50V
C612	1-101-005-00	CERAMIC	0.022MF		50V
C701	1-102-963-00	CERAMIC	33PF	5%	50V
C702	1-102-963-00	CERAMIC	33PF	5%	50V
C703	1-124-463-00	ELECT	0.1MF	20%	50V
C704	1-161-379-00	CERAMIC	0 01MF	30%	16V
C705	1-125-486-11	DOUBLE LAYERS	0.22F		5.5V
C706	1-161-379-00	CERAMIC	0.01MF	30%	16V
C707	1-126-157-11	ELECT	10MF	20%	16V
C708	1-126-154-11	ELECT	47MF	20%	6.3V
C750	1-162-286-31	CERAMIC	220PF	10%	50V
C751	1-162-286-31	(S100L)...CERAMIC	220PF		50V
C752	1-162-286-31	(S100L)...CERAMIC	220PF		50V
C753	1-162-286-31	CERAMIC	220PF	10%	50V
C754	1-162-286-31	CERAMIC	220PF	10%	50V
C755	1-162-286-31	CERAMIC	220PF	10%	50V
C756	1-162-286-31	CERAMIC	220PF	10%	50V
C757	1-162-286-31	CERAMIC	220PF	10%	50V
C758	1-162-286-31	CERAMIC	220PF	10%	50V
C759	1-162-286-31	CERAMIC	220PF	10%	50V
C760	1-162-286-31	CERAMIC	220PF	10%	50V
C761	1-162-286-31	CERAMIC	220PF	10%	50V
C762	1-162-286-31	CERAMIC	220PF	10%	50V
C763	1-162-286-31	CERAMIC	220PF	10%	50V
C764	1-162-286-31	CERAMIC	220PF	10%	50V
C765	1-162-286-31	CERAMIC	220PF	10%	50V
C801	1-162-211-31	(S300L)...CERAMIC	33PF	5%	50V
C802	1-162-211-31	(S300L)...CERAMIC	33PF	5%	50V
C803	1-161-379-00	(S300L)...CERAMIC	0.01MF	30%	16V
C804	1-123-356-00	(S300L)...ELECT	10MF	20%	25V
C805	1-162-282-31	(S300L)...CERAMIC	100PF	10%	50V
C806	1-162-282-31	(S300L)...CERAMIC	100PF	10%	50V
CF101	1-527-344-91	FILTER, CERAMIC			
CF102	1-527-344-91	FILTER, CERAMIC			
CF103	1-527-344-91	(IT,WG)....FILTER, CERAMIC			
CF301	1-527-981-00	FILTER, CERAMIC			
CF401	1-567-250-11	OSCILLATOR, CERAMIC			
CF701	1-567-738-11	VIBRATOR, CERAMIC			
CF801	1-567-738-11	(S300L)...VIBRATOR, CERAMIC (4MHz)			
CN501	*1-566-167-11	HOUSING, CONNECTOR 5P			
CN502	*1-564-342-11	PIN, CONNECTOR 8P			
CN503	*1-564-340-21	(S100L)...PIN, CONNECTOR 6P			
CN503	*1-564-341-21	(S300L)...PIN, CONNECTOR 7P			
CN504	*1-566-167-11	HOUSING, CONNECTOR 5P			
CN701	*1-564-496-11	(S300L)...PIN, CONNECTOR 3P			
CN801	1-564-980-11	(S300L)...PIN, CONNECTOR 4P (CONTROL S IN)			
CN802	1-564-980-11	(S300L)...PIN, CONNECTOR 4P (CONTORL S OUT)			
CNJ401	1-565-352-11	JACK, PIN 2P (OUTPUT)			
CP701	1-232-953-11	COMPOSITION CIRCUIT BLOCK			
CP702	1-233-081-11	COMPOSITION CIRCUIT BLOCK			
D101	8-719-000-26	DIODE US1060M			
D201	8-719-000-26	DIODE US1060M			
D401	8-719-000-26	DIODE US1060M			
D402	8-719-000-26	DIODE US1060M			
D403	8-719-000-26	DIODE US1060M			
D404	8-719-000-26	DIODE US1060M			
D405	8-719-000-26	DIODE US1060M			
D501	8-719-200-77	DIODE 10E2N			
D502	8-719-200-77	DIODE 10E2N			
D503	8-719-000-26	DIODE US1060M			
D504	8-719-000-26	DIODE US1060M			
D505	8-719-999-62	DIODE EQA01-06S2			
D506	8-719-002-36	DIODE UZL-24M			
D701	8-719-000-26	DIODE US1060M			
D702	8-719-000-26	(IT)...DIODE US1060M			
D703	8-719-000-26	(IT)...DIODE US1060M			
D704	8-719-000-26	DIODE US1060M			
D705	8-719-000-26	DIODE US1060M			
D706	8-719-000-26	DIODE US1060M			
D707	8-719-000-26	DIODE US1060M			
D708	8-719-000-26	DIODE US1060M			
D709	8-719-000-26	DIODE US1060M			
D710	8-719-000-26	DIODE US1060M			
D711	8-719-000-26	DIODE US1060M			
D712	8-719-000-26	DIODE US1060M			
D713	8-719-000-26	DIODE US1060M			
D714	8-719-000-26	DIODE US1060M			
D715	8-719-000-26	(S300L)...DIODE US1060M			
D716	8-719-000-26	(S300L)...DIODE US1060M			
D750	8-719-310-89	(S300L)...DIODE SEL1515W-C (PRESET)			
D751	8-719-310-89	(S300L)...DIODE SEL1515W-C (TUNING)			
D799	8-719-000-26	DIODE US1060M			
D801	8-719-000-26	(S300L)...DIODE US1060M			
FE101	1-463-857-11	(IT,WG)....FRONT END (FM)			
FE101	1-463-871-11	(AEP,UK)...FRONT END (FM)			
FE201	1-236-026-11	RF BLOCK (MW)			
FE202	1-236-028-11	RF BLOCK (LW)			
FL701	1-519-460-11	INDICATOR TUBE, FLUORESCENT			
IC301	8-759-804-55	IC LA1266			
IC401	8-759-801-80	IC LA3401			
IC501	8-759-820-09	IC LA5667			
IC601	8-759-820-91	IC LC7218			
IC701	8-759-230-70	IC TMP47C441AN-1664			
IC801	8-759-820-49	(S300L)...IC LC6527C-3750			
IFT301	1-404-713-11	TRANSFORMER, IF			
JP501	1-535-416-00	TERMINAL			
JP502	1-535-416-00	TERMINAL			
L101	1-408-575-00	INDUCTOR	100UH		
L102	1-408-575-00	(S300L/S100L;IT,WG)...INDUCTOR	100UH		
L201	1-408-425-00	INDUCTOR	220UH		
L301	1-408-920-00	INDUCTOR	4.7MMH		
L701	1-410-564-11	INDUCTOR	100UH		
LPF401	1-235-164-00	FILTER, LOW PASS			
LPF402	1-235-164-00	FILTER, LOW PASS			

Ref.No.	Part No.	Description
PC501⚠.	1-553-318-00	SWITCH, PUSH (AC POWER)(1 KEY)
PT501⚠.	1-449-400-11	TRANSFORMER, POWER
Q101	8-729-266-93	TRANSISTOR 2SC2669
Q102	8-729-266-93	TRANSISTOR 2SC2669
Q103	8-729-266-93	(S300L/S100L;IT,WG)..TRANSISTOR 2SC2669
Q104	8-729-266-93	(S300L/S100L;IT,WG)..TRANSISTOR 2SC2669
Q105	8-719-115-12	TRANSISTOR BN1L4M
Q106	8-729-900-80	TRANSISTOR DTC114ES
Q201	8-729-806-28	TRANSISTOR 2SC3402
Q202	8-729-806-28	TRANSISTOR 2SC3402
Q203	8-729-806-28	TRANSISTOR 2SC3402
Q204	8-729-801-72	TRANSISTOR 2SC2603-E
Q205	8-729-600-60	TRANSISTOR 2SA1115P
Q206	8-729-806-28	TRANSISTOR 2SC3402-TP
Q301	8-729-600-27	TRANSISTOR 2SC634SP
Q401	8-729-900-80	TRANSISTOR DTC114ES
Q402	8-729-600-27	TRANSISTOR 2SC634SP
Q403	8-729-600-27	TRANSISTOR 2SC634SP
Q601	8-729-202-67	TRANSISTOR 2SK246GR3
Q602	8-729-201-84	TRANSISTOR 2SC3112B
Q603	8-729-202-67	TRANSISTOR 2SK246GR3
Q604	8-729-201-84	TRANSISTOR 2SC3112B
Q701	8-729-806-34	TRANSISTOR 2SC3400
Q702	8-729-806-34	TRANSISTOR 2SC3400
Q703	8-729-806-34	(S300L)...TRANSISTOR 2SC3400
Q704	8-729-806-34	(S300L)...TRANSISTOR 2SC3400
R101	1-249-411-11	CARBON 330 5% 1/4W
R102	1-249-411-11	CARBON 330 5% 1/4W
R103	1-249-411-11	CARBON 330 5% 1/4W
R104	1-249-432-11	CARBON 18K 5% 1/4W
R105	1-249-414-11	CARBON 560 5% 1/4W
R106	1-249-411-11	CARBON 330 5% 1/4W
R107	1-249-434-11	CARBON 27K 5% 1/4W
R108	1-249-411-11	(S300L/S100L;IT,WG)..CARBON 330 5% 1/4W
R109	1-249-432-11	(S300L/S100L;IT,WG)..CARBON 18K 5% 1/4W
R110	1-249-416-11	(S300L/S100L;IT,WG)..CARBON 820 5% 1/4W
R111	1-249-411-11	(S300L/S100L;IT,WG)..CARBON 330 5% 1/4W
R112	1-249-434-11	(S300L/S100L;IT,WG)..CARBON 27K 5% 1/4W
R113 ⚠.	1-247-694-11	(S300L/S100L;IT,WG) ....CARBON 33 5% 1/4W F
R114	1-249-439-11	CARBON 68K 5% 1/4W
R115	1-249-425-11	CARBON 4.7K 5% 1/4W
R116	1-249-429-11	CARBON 10K 5% 1/4W
R201	1-249-441-11	CARBON 100K 5% 1/4W
R202	1-249-437-11	CARBON 47K 5% 1/4W
R203	1-249-425-11	CARBON 4.7K 5% 1/4W
R204	1-249-425-11	CARBON 4.7K 5% 1/4W
R205	1-249-429-11	CARBON 10K 5% 1/4W
R206	1-249-441-11	CARBON 100K 5% 1/4W
R207	1-249-437-11	CARBON 47K 5% 1/4W
R208	1-247-903-00	CARBON 1M 5% 1/4W
R209	1-249-402-11	CARBON 56 5% 1/4W
R210	1-249-433-11	CARBON 22K 5% 1/4W
R211	1-249-421-11	CARBON 2.2K 5% 1/4W
R212	1-249-434-11	CARBON 27K 5% 1/4W
R213	1-249-433-11	CARBON 22K 5% 1/4W
R214	1-249-413-11	CARBON 470 5% 1/4W
R215	1-249-441-11	CARBON 100K 5% 1/4W
R301 ⚠.	1-247-702-11	CARBON 150 5% 1/4W F
R302	1-249-431-11	CARBON 15K 5% 1/4W
R303	1-249-423-11	(S300L)...CARBON 3.3K 5% 1/4W
R304	1-249-421-11	CARBON 2.2K 5% 1/4W
R305	1-249-434-11	CARBON 27K 5% 1/4W
R306	1-249-441-11	CARBON 100K 5% 1/4W
R307	1-249-439-11	CARBON 68K 5% 1/4W
R308	1-247-848-11	CARBON 5.1K 5% 1/4W
R309	1-249-429-11	CARBON 10K 5% 1/4W
R310	1-249-423-11	CARBON 3.3K 5% 1/4W
R311	1-249-404-00	CARBON 82 5% 1/4W
R312	1-249-417-11	CARBON 1K 5% 1/4W
R313	1-249-421-11	CARBON 2.2K 5% 1/4W
R401	1-249-429-11	CARBON 10K 5% 1/4W
R402	1-249-421-11	CARBON 2.2K 5% 1/4W
R403	1-247-885-00	CARBON 180K 5% 1/4W
R404	1-247-885-00	CARBON 180K 5% 1/4W
R405	1-247-883-00	CARBON 150K 5% 1/4W
R406	1-247-883-00	CARBON 150K 5% 1/4W
R407	1-249-423-11	CARBON 3.3K 5% 1/4W
R408	1-249-423-11	CARBON 3.3K 5% 1/4W
R409	1-249-423-11	CARBON 3.3K 5% 1/4W
R410	1-249-423-11	CARBON 3.3K 5% 1/4W
R411	1-249-441-11	CARBON 100K 5% 1/4W
R412	1-249-441-11	CARBON 100K 5% 1/4W
R413	1-249-441-11	CARBON 100K 5% 1/4W
R414	1-249-429-11	CARBON 10K 5% 1/4W
R415	1-249-429-11	CARBON 10K 5% 1/4W
R416	1-249-423-11	CARBON 3.3K 5% 1/4W
R417	1-249-432-11	CARBON 18K 5% 1/4W
R418	1-249-426-11	CARBON 5.6K 5% 1/4W
R419 ⚠.	1-247-696-11	CARBON 47 5% 1/4W F
R501 ⚠.	1-247-752-11	CARBON 1K 5% 1/2W F
R502	1-249-437-11	CARBON 47K 5% 1/4W
R503	1-249-414-11	CARBON 560 5% 1/4W
R601	1-249-417-11	CARBON 1K 5% 1/4W
R602	1-249-417-11	CARBON 1K 5% 1/4W
R603	1-249-417-11	CARBON 1K 5% 1/4W
R604	1-249-417-11	CARBON 1K 5% 1/4W
R605	1-249-429-11	CARBON 10K 5% 1/4W
R606	1-249-429-11	CARBON 10K 5% 1/4W
R607	1-249-429-11	CARBON 10K 5% 1/4W
R608	1-249-429-11	CARBON 10K 5% 1/4W
R609	1-249-429-11	CARBON 10K 5% 1/4W
R610	1-249-429-11	CARBON 10K 5% 1/4W
R611	1-249-429-11	CARBON 10K 5% 1/4W
R612 ⚠.	1-247-696-11	CARBON 47 5% 1/4W F
R613 ⚠.	1-247-700-11	CARBON 100 5% 1/4W F
R614	1-249-423-11	CARBON 3.3K 5% 1/4W
R615	1-249-414-11	CARBON 560 5% 1/4W
R616	1-249-418-11	CARBON 1.2K 5% 1/4W
R617	1-249-410-11	CARBON 270 5% 1/4W
R618	1-249-425-11	CARBON 4.7K 5% 1/4W
R619	1-249-421-11	CARBON 2.2K 5% 1/4W
R620	1-249-425-11	CARBON 4.7K 5% 1/4W
R621	1-249-425-11	CARBON 4.7K 5% 1/4W
R622	1-249-405-11	CARBON 100 5% 1/4W

Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Ref.No.	Part No.	Description
R623	1-249-417-11	CARBON 1K 5% 1/4W
R624	1-249-414-11	CARBON 560 5% 1/4W
R625	1-249-418-11	CARBON 1.2K 5% 1/4W
R626	1-249-410-11	CARBON 270 5% 1/4W
R627	1-249-433-11	CARBON 22K 5% 1/4W
R628	1-249-421-11	CARBON 2.2K 5% 1/4W
R629	1-249-425-11	CARBON 4.7K 5% 1/4W
R701	1-249-405-11	CARBON 100 5% 1/4W
R702	1-249-441-11	CARBON 100K 5% 1/4W
R703	1-249-441-11	CARBON 100K 5% 1/4W
R704	1-247-855-00	(S100L)...CARBON 10K
R704	1-249-417-11	(S300L)...CARBON 1K 5% 1/4W
R705	1-249-441-11	CARBON 100K 5% 1/4W
R706	1-249-441-11	CARBON 100K 5% 1/4W
R707	1-249-408-11	(S300L)...CARBON 180 5% 1/4W
R708	1-249-408-11	(S300L)...CARBON 180 5% 1/4W
R709	1-249-429-11	(S300L)...CARBON 10K 5% 1/4W
R710	1-249-429-11	(S300L)...CARBON 10K 5% 1/4W
R751	1-249-429-11	(S300L)...CARBON 10K 5% 1/4W
R752	1-249-429-11	CARBON 10K 5% 1/4W
R753	1-249-429-11	CARBON 10K 5% 1/4W
R801	1-249-425-11	(S300L)...CARBON 4.7K 5% 1/4W
R802	1-249-393-11	(S300L)...CARBON 10 5% 1/4W
R803	1-249-417-11	(S300L)...CARBON 1K 5% 1/4W
R804 ⚠.	1-247-711-11	(S300L)...CARBON 680 5% 1/4W F
RV301	1-228-996-00	RES, ADJ, CARBON 47K (STOP LEVEL)
RV302	1-228-995-00	RES, ADJ, CARBON 22K (AM METER)
RV401	1-228-997-00	RES, ADJ, CARBON 100K(STEREO SEPARATION)
S701	1-554-303-21	SWITCH, KEY BOARD (1)
S702	1-554-303-21	SWITCH, KEY BOARD (2)
S703	1-554-303-21	SWITCH, KEY BOARD (3)
S704	1-554-303-21	SWITCH, KEY BOARD (4)
S705	1-554-303-21	SWITCH, KEY BOARD (5)
S706	1-554-303-21	SWITCH, KEY BOARD (6)
S707	1-554-303-21	SWITCH, KEY BOARD (7)
S708	1-554-303-21	SWITCH, KEY BOARD (8)
S709	1-554-303-21	SWITCH, KEY BOARD (9)
S710	1-554-303-21	SWITCH, KEY BOARD (0)
S711	1-554-303-21	SWITCH, KEY BOARD (ENTER)
S712	1-554-303-21	SWITCH, KEY BOARD (S300L;PRESET/TUNING),(S100L;MEMORY)
S713	1-554-303-21	SWITCH, KEY BOARD (S300L;MEMORY),(S100L;MEMORY SCAN)
S714	1-554-303-21	SWITCH, KEY BOARD (S300L;MEMORY SCAN),(S100L;AUTO TUNING)
S715	1-554-303-21	SWITCH, KEY BOARD (S300L;AUTO TUNING),(S100L;BAND FM/AM)
S716	1-554-303-21	SWITCH, KEY BOARD (S300L;BAND),(S100L;STEREO/MUTE)
S717	1-554-303-21	SWITCH, KEY BOARD (S300L;ST/MUTE),(S100L;TUNING +)
S718	1-554-303-21	SWITCH, KEY BOARD (S300L;FM AUTO MEMORY),(S100L;TUNING -)
S719	1-571-083-21	(S300L)...SWITCH, SLIDE (PROGRAM)
S720	1-571-327-21	(S300L)...SWITCH, ROTARY (TUNING)
T301	1-404-743-11	COIL, DISCRIMINATOR
T302	1-404-742-11	(S300L)...COIL, DISCRIMINATOR
T303	1-235-126-00	(S300L/S100L;IT,WG) ...ENCAPSULATED COMPONENT
TM101	*1-536-708-00	(AEP,UK)...TERMINAL BOARD, PUSH 4P
TM101	*1-537-138-21	(IT,WG)....TERMINAL BOARD (ANT)
TM102	1-563-199-11	(AEP,UK)...CONNECTOR, PAL
TP301	*1-560-060-00	PIN, CONNECTOR 2P
⚠WP501.	*1-535-139-00	BASE POST 22MM (10MM PITCH) 2P
X601	1-577-126-11	VIBRATOR, CRYSTAL (7.2MHz)

ACCESSORY & PACKING MATERIAL

1-558-787-21	CORD, CONNECTION
1-558-233-11	(S300L)...CORD (WITH CONNECTOR SIRCS) 4P
3-786-281-41	(S300L;AEP,IT,WG)...MANUAL, INSTRUCTION
3-786-282-11	(AEP,UK)...........MANUAL, INSTRUCTION
3-786-282-41	(S100L;AEP,IT,WG)...MANUAL, INSTRUCTION
1-402-082-11	ANTENNA, FERRITE-ROD(LW/MW/SW)
1-501-224-00	(AEP,UK)...ANTENNA, FEEDER
1-501-369-11	(IT).......ANTENNA
*3-704-346-01	(S300L)...SHEET (STANDARD), PROTECTION
*3-704-339-01	(S100L)...SHEET (STANDARD), PROTECTION
*4-905-292-91	(S100L)...INDIVIDUAL CARTON
*4-908-060-91	(S300L)...INDIVIDUAL CARTON
4-915-426-01	(S300L)...CUSHION
*4-917-021-01	(S100L)...CUSHION

Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Sony Corporation
Audio Group

English
88F0653-1
Printed in Japan

©1988.6

Published by A/V Engineering Service Dept.